

CLAIMS

1. A titanium dioxide powder having a rutile content of 80% or more and a BET specific surface area of 30 m²/g or more.

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2. The titanium dioxide powder according to claim 1, wherein the rutile content is 85% or more.

10 3. The titanium dioxide powder according to claim 1, obtained by a gaseous phase method using titanium tetrachloride as a raw material.

4. The titanium dioxide powder according to claim 1, obtained by reacting titanium tetrachloride, oxygen gas, hydrogen gas, and steam in a gaseous phase.

15 5. The titanium dioxide powder according to claim 1, obtained by reacting titanium tetrachloride, oxygen gas, hydrogen gas, and steam in a gaseous phase after preheating.

20 6. A method for producing a titanium dioxide powder comprising reacting a titanium tetrachloride gas, oxygen gas, hydrogen gas, and steam in a gas phase, characterized by supplying the steam in an amount equal to or greater than a chemically equivalent amount necessary for oxidizing all of the titanium tetrachloride gas.

25 7. The method according to claim 6, wherein the steam is supplied in an amount of 100 to 2,000 l per 1 l of titanium tetrachloride gas.

8. The method according to claim 6, wherein the titanium tetrachloride, oxygen

gas, hydrogen gas, and steam are reacted in a gaseous phase after preheating.

9. The method according to claim 6, wherein the titanium oxide powder has a BET specific surface area of 30 m²/g or more.

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10. The method according to claim 6, wherein the reaction is carried out at 750-950°C and the titanium oxide powder obtained has a rutile content of 80% or more.

11. The method according to claim 6, wherein the reaction is carried out at 10 450-700°C and the titanium oxide powder obtained has a rutile content of 20% or more.